### Screen

The Screen system setting contains three screens: General, Clear Type, and Text Size.

#### **General Screen**



#### Orientation

The General screen enables you to set the dynamic screen rotation. Three choices of screen orientation are supported: Portrait, Landscape (right-handed), and Landscape (left-handed).

#### **Align Screen**

The General Tab also allows you to re-align the screen. You need to re-align the screen if tapping buttons or icons with the stylus no longer seems to work appropriately.

Tapping **Align Screen** brings up the align screen window where you are guided to tap a target several times. This recalibrates how the touch screen receives input.

- Alignment should always be performed with a stylus designed for touch panel applications. The small point is required for accurate calibration.
- Press the stylus firmly into the center of the cross-hair target once and release. Do not "double-tap" the target.

#### ClearType Screen



The display supports ClearType font rendering, which is a Microsoft technology that dramatically increases the readability of text on LCD displays.

To enable ClearType font rendering, select **Enable ClearType** and tap **OK**.

For more information about ClearType font rendering, visit: www.microsoft.com/typography/WhatIsClearType.mspx.

**Text Size Screen** 

Screen ⓐ 👯 ┥× 🖅 5:54	The Text Size screen enables you to perform font scaling within certain views of the:
ClearType 🧲 Text Size 🔪 General	Home screen.
Adjust the text size to see more content or increase the readability in many programs.	Contacts,     Colondar
Smallest Largest	• Calendar,
	Messaging, and
	• lasks.
Example:	
I'll get back to you.	Font scaling means that you can increase or decrease the point size of the font on application windows.
	To change the font size, move the slider toward <b>Smallest</b> or <b>Largest</b> . The Example text changes to reflect the font change. Tap <b>OK</b> to save the new font size setting.
😰 💿 ОК	

### **Task Manager**

The Task Manager provides information about applications and processes running on your mobile computer. You can use the Task Manager to monitor the memory and CPU usage of specific applications and processes. Check the Task Manager when you are receiving out of memory errors or when the mobile computer is running slowly.

Task Manager	a 🛟 🔸 🛛	<b>₽</b> 5:56
Application	Mem	CPU
ActiveSync	628K	0 %
ॆ File Explorer	196K	0 %
🌃 Task Manager	92.0K	0 %
End Task	Menu	×

#### Using the Task Manager

## Applications



To view the status of the programs running on your mobile computer, tap the **Menu** button at the bottom of the screen, then tap **View > Applications**.

From the application list, you can:

- Tap and hold on an application, then tap Switch To on the pop-up menu.
- Tap and hold on an application, then tap End Task or End All Tasks on the pop-up menu.
- Note: Anytime you stop a running program, it frees up memory. To free up memory, return to the running program, save your data, and close the application.

#### Processes



To view information about the processes running on the mobile computer, tap the **Menu** button at the bottom of the screen, then tap **View > Processes**.



## **Connections Menu**

The Connections system setting provides access to the terminal's various wireless communication options.



Icon Tapping this icon		Tapping this icon
Beam	•0	Enable the terminal to receive incoming beams from devices using Bluetooth wireless technology. See Working with the Bluetooth Radio on page 10-1.
Connections		Opens Microsoft's connections manager. See Connections Manager on page 8-2.
Dolphin Wireless Manager		Manages the wireless radios installed in the terminal. See Dolphin Wireless Manager on page 8-4. Note: The Dolphin Wireless Manager icon may not appear on the Connections menu on terminals running Microsoft Windows Embedded Handheld 6.5 Classic. For information on how to access the Dolphin Wireless Manager, see page 8-4.
Domain Enroll		Opens the Enrollment screen for connecting your phone with company resources. Note: System administrator password is required for domain enrollment.
USB to PC	Ĺ.	Enables advanced wired USB to PC communication via sync sofware. See Connecting and Synchronizing the Terminal and Workstation on page 8-6.
Network Cards		Manage Network card settings.

Note: All server-assigned IP addresses use Dynamic Host Configuration Protocol (DHCP).

### **Connections Manager**

Microsoft's Connections Manager sets up multiple network connections to Internet Service Providers (ISPs) via external modem.

#### Do NOT enter connection parameters in the Connections Manager if:

- you are using one of the on-board wireless radios to connect to a network. The Dolphin terminal uses
  the settings from each radio's configuration utility to connect. The connections manager is used
  primarily to setup WAN modem dial up connections.
- you are using Wireless Zero Config. By default, WZC is disabled on Dolphin terminals.

### To Access the Connections Manager



### Tasks

The Tasks screen enables you to initially configure, and then manage network settings when using a modem. Select an item in this list and then complete the setup screens that follow with the appropriate information for your network.

#### My ISP

The links under this heading enables you to add and manage modem connections to an ISP. To complete the setup screens, obtain the following information from your ISP:

- · ISP dial-up access telephone number
- Username
- Password
- TCP/IP settings

#### My Work Network

These links enable you to establish the following connections types:

- Modem
- Virtual Private Network (VPN)

- Proxy server connection
- Note: If you are connected to your ISP or private network during synchronization, the terminal should download the proper proxy settings during synchronization with the workstation. If these settings are not on your workstation or need to be changed, ask your ISP or network administrator for the proxy sever name, server type, port, type of Socks protocol used, and your user name and password.

To complete the setup screens, obtain the network parameters from your system administrator.

#### Modify an Existing Connection

**Manage Existing Connections** appears on the Connections tab after at least one network connection has been established.

Tap Manage Existing Connections on the Horizontal scroll and follow the setup screens.



### Advanced

The Advanced screen enables you to select the default network, dialing rules, and IP address exceptions for modem connections.



Note: You should not need to change Advanced settings because most ISPs now use DHCP addresses.

## **Dolphin Wireless Manager**

The Dolphin Wireless Manager provides a centralized interface that enables and disables all the onboard radios. Each radio has its own configuration program. The Dolphin Wireless Manager also provides shortcuts to the configuration utilities for each radio.

Tap ( on the Home screen to access the **Dolphin Wireless Manager**.

- OR
- 1. Tap once on the Title bar to access the Horzontal Scroll bar.
- 2. Tap 🔚 .
- 3. Select, "Dolphin Wireless Manager".



### **Dolphin Wireless Manager Window**



### **Enabling the Radios**

1. Tap (IV) on the Home screen to access the **Dolphin Wireless Manager**.

DolphinWM	a ‡‡ 🗀 🕂 建 6:17
WLAN	%, Œ₽
Bluetooth	8x OFF
Phone	× OFF
. Annual	A second and the second of

- 2. Tap anywhere inside the rectangle of the radio you want to enable.
- 3. The radio begins activating.

4. When the radio is activated (i.e., transmitting a signal), the **OFF** button changes to **ON**.



Note: If applicable, information about the radio appears in the rectangle.

### **Accessing Radio Configuration Utilities**

Each radio has its own configuration utility that you can access by tapping Menu on the tile bar.



Radio Type	Menu Option
802.11a/b/g/n Tap WLAN Settings and the Honeywell WLAN Security Suppl	
	The Honeywell WLAN Security Supplicant User's Guide is available for download from the Dolphin 7800 product page at www.honeywellaidc.com.
Bluetooth	Tap <b>Bluetooth Settings</b> and the Bluetooth Settings screen opens. For details, see Working with the Bluetooth Radio on page 10-1.
GSM/HSDPA/UMTS/GPRS/ EDGE	Tap <b>Phone Settings</b> and the Phone opens. For details, see Working with Wireless Wide Area Networking (WWAN) on page 9-1.
GSM/CDMA	Tap <b>Gobi Settings</b> and the Gobi Manager opens. For details, see Gobi Manager on page 9-11.

### **Network Cards**

The Network Cards screen allows you to set and configure the type of Network Adapter the Network card in the terminal uses. You can modify the adapter settings (e.g., Name Servers or IP address) by tapping on the adapter type or highlighting the adapter and tapping **Edit** at the bottom of the screen.



### Connecting and Synchronizing the Terminal and Workstation

To synchronize data between the terminal and the workstation, ActiveSync (version 4.5 or higher) or Windows Mobile Device Center (WMDC) must be installed and configured for the appropriate communication type on the host workstation (Windows-based PC) and the Dolphin terminal. Dolphin terminals ship with ActiveSync already installed. Therefore, if ActiveSync or WMDC is already installed on the host workstation, you just need to connect the Dolphin terminal to the host workstation (via Dolphin peripheral) to initiate communication.

If ActiveSync (4.5 or higher) or WMDC is not installed on the host workstation, you can download and <u>http://go.microsoft.com/fwlink/?LinkId=147001</u> the most current version of the software from the Microsoft Web site (http://go.microsoft.com/fwlink/?LinkId=147001).

Note: ActiveSync on your Dolphin terminal works with WMDC on host workstations running Windows Vista or Windows 7 and with ActiveSync on host workstations running Windows XP. For detailed information on ActiveSync and WMDC visit the Microsoft Windows Phone Web site.

When communicating via ActiveSync or WMDC, your terminal is designed to be connected to the host workstation with a communication peripheral sold/manufactured by Honeywell, such as the charge/ communication cable. Use of any peripheral not sold/manufactured by Honeywell may cause damage not covered by the warranty.

### Capabilities

- Back up and restore your device data.
- Copy (rather than synchronize) files between your device and workstation.
- Control when synchronization occurs by selecting a synchronization mode. For example, you can synchronize continually while connected to your workstation or only when you choose the synchronize command.

• Select which information types are synchronized, controling how much data is synchronized. For example, you can choose how many weeks of past appointments you want synchronized.

### **Communication Types**

The 7800 terminal supports Hi-Speed USB communication (USB 2.0) via ActiveSync through the I/O Connector (see page 3-10) on the bottom panel of the terminal. The maximum data transfer rate is 480 Mbps. A USB cable and a Honeywell hardware peripheral (e.g., HomeBase) allow the terminal to communicate with a workstation or to networked through a USB hub. The Dolphin terminal defaults to USB communication out of the box.

### Hardware Requirements for Setup

- Dolphin communication peripheral (e.g., HomeBase, eBase, USB Communication/Charge Cable) and power supply.
- A USB cable if one is not supplied with your Dolphin communication peripheral.

### Software Requirements for Communication

- ActiveSync (v4.5 or higher) or Windows Mobile Device Center installed and configured on the host workstation (PC), see Setting Up the Host Workstation on page 8-7.
   Note: ActiveSync or Windows Mobile Device Center must be setup on your workstation before you initiate synchronization from the terminal for the first time.
- Windows 98 Second Edition, Windows Me, Windows 2000, Windows NT (4.0 SP6 or higher), Windows XP, Windows Vista, and Windows 7 operating systems.

### **Setting Up the Host Workstation**

To synchronize data between the terminal and the workstation, ActiveSync (v4.5 or higher) or Windows Mobile Device Center must be configured for same communication type on both the host workstation and the Dolphin terminal.

#### ActiveSync

Verify that ActiveSync is configured to use the appropriate communication type.

- 1. In the ActiveSync window on your workstation, select File > Connection Settings.
- 2. Check the box next to "Allow USB connections".

### Connecting the Dolphin Terminal to the Host Workstation

After setting up both the workstation and the terminal:

- 1. Connect the Dolphin terminal to the workstation using a Dolphin communication peripheral.
- 2. ActiveSync or Windows Mobile Device Center should open and connect automatically to the Dolphin terminal.

### Synchronizing with the Host Workstation

After setup, synchronization begins automatically whenever the terminal's mechanical connector connects to a Dolphin peripheral that is connected to a host workstation with ActiveSync or Windows Mobile Device Center installed. For additional information visit the <u>Microsoft Phone Web site</u> (http://go.microsoft.com/fwlink/?LinkId=147001).

### Exploring the Terminal from the Workstation

#### ActiveSync

- 1. Open the main ActiveSync window (on the desktop).
- 2. Click Explore. This opens the Mobile Device folder for the terminal in Windows Explorer.
- 3. The Dolphin terminal is now treated as a mass storage device, and transferring files is as simple as dragging and dropping or copying and pasting.

#### Windows Mobile Device Center

- 1. Open Windows Mobile Device Center (on the desktop).
- 2. Click **File Management**. This opens the Mobile Device folder for the terminal.
- 3. The Dolphin terminal is now treated as a mass storage device, and transferring files is as simple as dragging and dropping or copying and pasting.

### Installing Additional Software

Dolphin terminals ship with the operating system, radio drivers, and custom Honeywell software already installed. These are the default programs that install when your terminal first boots up. You can install additional software programs to the terminal provided that the following parameters are met:

- The software program was created for a Windows Embedded Handheld 6.5 device.
- The terminal has enough memory to store and run the program.
- The program has an EXE, CAB, or DLL extension.

When selecting programs, verify that the program and version of the program are designed for the Windows Embedded Handheld 6.5 and the terminal's processor. You can verify your processor by tapping

Settings > System > About > Version. Make a note of the information in the Processor field.

To install additional software, you can use the communication options described in this chapter.

- Adding Programs Using ActiveSync or Windows Mobile Device Center, see page 8-8.
- Adding Programs Using the Internet, see page 8-10.

### Adding Programs Using ActiveSync or Windows Mobile Device Center

Generally, software for Windows Embedded Handheld devices must be installed to the host workstation first, then transferred to the Dolphin terminal.

Note: An active Microsoft ActiveSync or Windows Mobile Device Center connection between a host workstation and the Dolphin terminal is required to add programs. For additional information, see Connecting and Synchronizing the Terminal and Workstation on page 8-6.

- 1. Download the program to the workstation from either the Internet or the install CD. You may see a single \*.exe or setup.exe file, a \*.cab file, or a \*.dll file.
  - Note: There may be several versions of files for different device types and processors. Select the file that matches the terminal's processor.
- 2. Read any installation instructions, Read Me files, or documentation that comes with the program. Many programs provide special installation instructions.
- 3. Connect the terminal to the workstation via a Dolphin communication peripheral.

#### If the File is an Installer (\*.exe or \*.setup.exe)

An installer program is one that installs on the workstation and the terminal simultaneously; one process installs to both devices.

- 1. On the workstation, double-click the \*.exe or setup.exe file. The installation wizard begins.
- 2. Follow the directions on the workstation screen. The installation process includes transferring the software to the Dolphin terminal.

#### If the File is Not an Installer

Some programs cannot be installed on PCs because they are designed exclusively for Windows Embedded Handheld devices. In these cases, the appropriate files must be stored on the host workstationand transferred to the terminal via ActiveSync Explore or Windows Device Mobile File Management.

- Note: You know that the program is not an installer because an error message stating that the program is valid but designed for a different type of computer appears when you try to install the program on the workstation.
- 1. If you cannot find any installation instructions for the program in the Read Me file or documentation, do one of the following:
  - a. Open ActiveSync and click Explore, or
  - b. Open Windows Mobile Device Center and click File Management
- 2. On the workstation, navigate to the workstation folder containing the program file(s). Copy and paste the file(s) into the **Program Files** folder on the terminal.
  - If you want the program to be part of the Autoinstall that occurs after a factory reset or software upgrade, paste the program file(s) in both the \IPSM\Honeywell\Autoinstall folder and the \Honeywell\Autoinstall.
  - Note: Contact a Honeywell technical support representative for information on how to perform a factory reset. See Technical Assistance on page 18-2 or go to www.honeywellaidc.com.
- 3. On the terminal from the Start screen, tap **File Explorer**, navigate to the folder where the program is located.
- 4. Tap on the program file to start the installation.
  - If you copied the file to the \Honeywell\Autoinstall folder, you can perform a Soft Reset (CTRL + ENTER) to install the program. For more information, see Hardware Maintenance on page 3-16.

### **Connecting the Terminal to a Wireless Network**

You connect the terminal to a wireless network through the on-board radio (802.11a/b/g/n, Bluetooth, and/or GSM/CDMA). Each radio has its own configuration utility and requires specific information about the wireless network to connect. Successful connection depends on your network infrastructure about which you will need specific information from your network administrator.

#### WLAN (802.11a/b/g/n)

The 7800 has a 2.4 GHz 802.11b/g/n - 5.0 GHz 802.11a/n WLAN (Wireless Local Area Network) radio. The radio is interoperable with other 802.11a/b/g/n, Wi-Fi compliant products including access points (APs), workstations via PC card adapters, and other wireless portable devices. By default, the 802.11a/b/g/n radio is disabled after each factory reset. The next step is to configure the connection parameters of the radio to connect to a wireless network.

#### WLAN Radio

The WLAN radio is configured in the Honeywell WLAN Security Supplicant, which you access by tapping the program icon in the task tray near the bottom of the touch screen. For complete configuration instructions, download the Honeywell Secure Wireless (SWC) Client User's Guide from www.honeywellaidc.com. A link to this guide appears on the Dolphin 7800 product page.

### **Adding Programs Using the Internet**

When you have established a network connection, you can access the Internet and download additional software programs.

Note: When selecting programs, verify that the program and version of the program are designed for Windows Embedded Handheld and the terminal's processor. You can verify your processor by tapping

Settings > System > About > Version. Make a note of the information in the Processor field.

- 1. Open Internet Explorer and navigate to the program's location. You may see a single \*.exe or setup.exe file, or several versions of files for different device types and processors.
- 2. Select the program version that matches your Dolphin terminal and processor.
- 3. Read any installation instructions, Read Me files, or documentation that comes with the program. Many programs provide special installation instructions.
- 4. Download the program to the terminal directly from the Internet. You would normally store the program in the \Program Files folder unless another location is required by the program.
- 5. On the terminal, tap the installer file: e.g., \*.exe or setup.exe file.
- 6. The installation wizard for the program begins.
- 7. Follow the directions on the screen to complete the installation.

### Software Upgrades

Contact a Honeywell technical support representative for information on available software upgrades for your Dolphin terminal, see Customer Support on page 18-1 or go to www.honeywellaidc.com.

- To prevent data loss, back up all user data to an SD card or external memory device before performing an upgrade.
- Note: An active Microsoft ActiveSync or Windows Mobile Device Center connection between a host workstation and the Dolphin terminal may be required for some types of software upgrades. For additional information, see Connecting and Synchronizing the Terminal and Workstation on page 8-6.

For information on File Provisioning on the 7800, see page 2-10.

## 7800 COM Port Assignment Table

COM Port	Description
COM0	Unused
COM1	Unused
COM2	Bluetooth
СОМЗ	Unused
COM4	Available
COM5	Bluetooth DUN
COM6	Unused
COM7	GPS: COM Port for the GPS receiver
COM8	USB Serial: Virtual USB Serial port for ActiveSync
СОМ9	Bluetooth BTHATCI server

## Working with Wireless Wide Area Networking (WWAN)

### **Overview**

The 7800 has two options for WWAN connectivity, a data+voice GSM/HSPA+/UMTS/GPRS/EDGE and CDMA/EVDO radio or a data only Gobi radio, which supports GSM/HSPA+/UMTS/GPRS/EDGE and CDMA/1xRTT/EVDO.

GSM	Short for Global System for Mobile communications, GSM is an open, non-proprietary wireless WAN system that is constantly evolving and growing.
HSPA+	Short for High-Speed Download Packet Access, HSPA+ is a non-voice value added service that allows packet-switched data to be instantly sent and received across mobile telephone networks.
UMTS	Short for Universal Mobile Telecommunications System, UMTS is a non-voice value added service that allows packet-switched data to be instantly sent and received across mobile telephone networks.
GPRS	Short for General Packet Radio Service, GPRS is a non-voice value added service that allows packet-switched data to be instantly sent and received across mobile telephone networks.
EDGE	E-GPRS is a non-voice value added service that allows packet-switched data to be instantly sent and received across mobile telephone networks at a higher data rate than standard GPRS.
CDMA	Short for Code Division Multiple Access.
1xRTT	Short for Single-Carrier Radio Transmission Technology.
EVDO	Short for Evolution-Data Optimized.

### **Requirements**

Using GSM/HSPA+/UMTS/GPRS/EDGE requires:

- a network subscription to a GSM/HSPA+/UMTS/GPRS/EDGE network (you need to know what service providers are in your geographic area), and
- an installed SIM card that has been activated by the network service provider (see Installing a SIM Card and/or Memory Card on page 3-16).

Using a CDMA requires:

 an active account with a CDMA carrier. The account is linked to the Mobile Equipement Identifier (MEID) of the integrated WWAN radio.

### **Antenna Band**

The WWAN radio features an internal antenna that is optimized for power output and receiver sensitivity. This is an omni-directional antenna.

For the data only Gobi 3000 WWAN radio, there is a unified penta band antenna 800/850/900/1900/ 2100MHz (HSPA/UMTS), quad band antenna 850/900/1800/1900MHz (GSM/GPRS/EDGE), and dual band antenna 850/1900MHz (EVDO/CDMA) support.

For the voice + data WWAN radio, there is a unified penta band antenna 800/850/AWS/1900/2100MHz (HSPA+/UMTS), quad band antenna 850/900/1800/1900MHz (GSM/GPRS/EDGE), and dual band antenna 850/1900MHz (EVDO/CDMA) support.

#### Signal Strength

The signal strength of the WWAN connection is indicated by the number of bars that appear in the signal strength icon in the Title bar at the top of the window.



### Voice and Data Communication

Dolphin terminals with integrated GSM/HSPA+/UMTS/GPRS/EDGE radios are optimized for the following two-way voice and data communications:

Voice: GSM voice data (dial-up)

**Data:** Available speed depends on the wireless network carrier and their supported packet-data technology in addition to network conditions.

GPRS Class 10: data transmission max. 85.6 kbps (DL), max. 42.8 kbps (UL) HSPA+: data transmission max. 14.4 Mbps (DL), max. 5.76Mbps (UL) UMTS: data transmission max. 384 kbps (DL), max 384 kbps (UL) EDGE (E-GPRS) Class 10: data transmission max. 237 kbps (DL), max. 118 kbps (UL)

You can use the GSM radio for voice communication and data communication, but not at the same time. If you want to communicate over the phone (voice), you cannot send data. If you want to send data, you cannot use the phone.

### **Enabling the WWAN Radio**

By default, the WWAN radio is not enabled after a factory reset. Verify the status of the radio in the Dolphin Wireless Manager.



DolphinWM (a)	a) ## 4× (₽ 6:14 % (OFF)	DolphinWM WLAN	a #
Bluetooth	R, OFF	Bluetooth	8 <mark>, OFF</mark>
Phone	• ON	Gobi	s ON
Done 📰	Menu OK	Done (	Menu Ol

If the WWAN radio is OFF, tap the rectangle to enable or turn ON the radio.

### **GSM/HSPA+** Global Radio Dolphin Models

### **Voice Communication**

You can use the Dolphin terminal as a phone over the GSM radio.

### Audio Modes

The front panel of the 7800 contains both a speaker and a microphone that you can use to send and receive audio signals over the GSM network, see Front Panel: 7800 on page 3-5.

There are two audio modes:

- Handset Mode The front speaker is used for receiving handset voice calls and the front panel microphone provides audio input to the terminal.
- Hands-Free Mode Hands-free mode is when you use the rear speaker as a speakerphone. To switch to speakerphone, tap on the speaker button in the Dialer window, see Accessing the Dialer Window on page 9-4.

### **Volume Control**



Use the Dolphin keyboard to adjust the volume.

To raise the volume, press the Blue modifier key + up arrow.

To lower the volume, press the Blue modifier key + down arrow.

Or

Press the up or down arrow on the Volume Control button on the left side of the device to adjust the volume of the active speaker, see Volume Control Button on page 3-7.

### Accessing the Dialer Window

Note: The WWAN radio must be active for voice communication, see Enabling the WWAN Radio on page 9-3.



### Dialing

Once the dialer window is open, you can dial out two ways:

- Tap the buttons on the dialer window.
- Use the physical keyboard (when the keyboard is in numeric mode).

## Sending Calls

After the number is dialed, tap Talk

Note: The 🕤 icon indicates that the phone is in use.

## **Ending Calls**

While the phone call is live, tap End Send or End Key 0.

### **Accessing Voice Mail**



Note: Update the voice mail retrieval number by turning the phone OFF and then ON via the Dolphin Wireless Manager, see Enabling the WWAN Radio on page 9-3.

### **View Options**

From the view menu, you can modify the display screen to show Calls and Contacts, All Calls or Speed Dial numbers.

Tap Menu 🗐 > View.

## **Setup Options**

The Options menu contains four setting widows: Sounds, Security, Services, and Network.

## Tap Menu 💷 > Options.

Sounds

Phone	a 井 `	Yi •(× œ	2:30
Network 🖌	Sounds	> Secu	irity
Number: 1 (55 Ring type:	5) 555-8100		
Ring			
Ring tone:			
Ring01-Windov	vsPhone		
Keypad:			
Short tones			
0.00			
		(	ок)

The Sounds screen enables you to customize the:

- Ring type (e.g., Ring, Increasing ring, Ring once, Vibrate, Vibrate and ring, Vibrate then ring or None)
- Ring tone
- Keypad tone (e.g., Long, Short, or Off)

#### Security



The **Security** screen provides access to establish or change your security PIN. Check the box next to, "Require a PIN when the phone is used" to enable the PIN security feature.

#### Services



For each service, the phone reads settings from the network stored on the SIM card and then displays the available options from the carrier on the screen. To customize the settings, select it from the list and tap "Get Settings".

Network



You can find, select, and set your preferred network order from the **Network** screen.

## Data Communication (GSM/HSPA+ Global Radio Dolphin Models)

You set up data communication via the Connections Manager. The carrier on the SIM card is the ISP.

#### **System Requirements**

- The GSM radio must be enabled; see Enabling the WWAN Radio on page 9-3.
- You must have an active SIM card with a DATA plan installed; see Installing a SIM Card and/or Memory Card on page 3-16.

### Information Requirements

You must have from the SIM card carrier:

- The APN (access point name).
- The username and password of the account.

### **Establishing Data Communication**



2. Under My ISP, tap Add a new modem connection.

3. Enter a name for the connection. Select Cellular Line (GPRS) as the modem. Tap Next.



4. Enter the Access point name. Tap Next.



5. Enter the username and password from the account. Tap Finish.

Connections	a 井 🕇 12 8:42
Send GSM Data	
 User name:	Phone@cingulargprs.com
 Password:	****
Domain:*	
* If provided by I administrator.	ISP or network
	Advanced
Back	) (IIII) (Finish)

6. The connection you just created should appear in the list on the modem tab.

My ISP		a 🗱 🔸	<b>(1)</b> 9:31
General 🔇	Mode	em >	General
Tap and hold o more options.	n an existi	ng connectio	n for
Name		Number	
Send GSM	Data	ISP.CINGU	LAR
المسمح	. and a start of	and the second second	ساستعر

7. Tap and hold on the connection. Select **Connect** on the popup menu.



- 8. The network icon in the Title bar indicates the GSM radio is attempting to connect  $\overset{\blacksquare}{\leftarrow}$ .
  - Note: When the device is on a 2G (EDGE/GPRS) network, a data connection failure occurs if the phone is in use for a voice call while attempting a data connection. Simultaneous voice and data use is only supported if the device is on a 3G network. In 2G mode, a voice call takes precedence over data connections. Active data connections are placed in "park" mode automatically and the data is "retrieved" when the voice call ends.
- 9. When the connection is complete, the network icon changes to:
- 10. You can now send data over GSM.

#### Ending the Data Connection

By default, the data connection will disconnect after a certain amount of time passes without use. This period of time is determined by ISP.

To end the data connection manually, tap the network icon **1** in the Title bar and select **Disconnect** on the popup bubble.

### **Manual Network Selection**

You can select Automatic or Manual network selection. The Phone defaults to Automatic network selection.

1. When an active SIM card is inserted in the terminal, tap

		> Settings > Personal > Phone	> Menu > Options.
--	--	-------------------------------	-------------------

2. Select the Network tab.

b. The found networks appear.



- 3. Under Network selection, select Automatic (the default selection) or Manual.
  - a. If you select Manual, the Phone searches for available networks.

Searchin Please V	ng for all available networks. vait.
	Cancel
hoos	e Network
Choose Select then ta	Network an available network and p OK.
Choose Select then ta	e Network an available network and p OK.

c. Select a new network and tap **OK**. The Phone registers on the new network and the Network tab appears.

Cancel

ОК

- d. To switch to another network, tap the now active Select button and the process repeats.
- 4. To switch back to automatic roaming, select **Automatic** under **Select networks** and tap **OK**.

## Data Communication GSM/CDMA Dolphin Models

### Gobi Manager

The Gobi Manager enables you to see real time status of the radio, setup your Network selection, view you're profile and scan for networks. The Gobi Manager contains four tabs: Status, Setup, Profile, and About.

- 1. Tap () on the Home screen to access the **Dolphin Wireless Manager**.
- 2. Tap Menu.

Status Tab

3. Select Gobi Settings.

Gobi Manage	r 🛛 a 👯 ┥× 🖼 3:08
Status	Registered
RSSI	-87db
Mode	GSM
Network	AT&T
IP Address	
Radio Powe	er ON Start Data Session er OFF Stop Data Session
Radio Pow Radio Powe Status Setup	er ON Start Data Session er OFF Stop Data Session o Profile About

Setup Tab

Gobi Manager 🛛 井 ୶ 🖅 3:08	;
rNetwork Setup-	
Firmware AT&T	
SIM Slot SIM Slot 0	
APN WAP.CINGULAR	
Username WAP@CINGULARGPRS.COM	
Password CINGULAR1	
Autostart Data Session	
Apply	
Activation Activate OTA	
Status Setup Profile About	

The **Status** tab contains the real time radio status information including:

- The power status of the radio (e.g., ON or OFF)
- The received signal strength intensity (RSSI)
- The radio mode used (e.g., GSM, UMTS, EVDO or 1xRTT)
- The network firmware used
- The IP Address assigned

You can also turn the radio ON or OFF and Start or Stop a data session from the Status tab.

The **Setup** tab allows you to view and customize the Network Setupincluding:

- The Nework Firmware (e.g., AT&T, Verizon, Sprint, or T-Mobile)
- The SIM Slot accessed
- The Access Point Name (APN)
- · The Username of the account
- The Password of the account
- Enable or Disable Automatic Data Sessions
- Activate Over the Air (OTA)

**Profile Tab** 

Gobi Manager 🛛 a 📰 🕂 🕢 3:09
Refresh
Status Setup Profile About

The **Profile** tab allows you to see Radio capability information and network statistics including:

- Radio Hardware and Software versions
- Radio and SIM identification numbers
- · Serving network connection type and state
- Available radio interfaces for the current serving network

About Tab Displays copyright and version information for the Gobi Connection Manager.

### **Establishing Data Communication**

- 1. Tap *w* on the Home screen to access the **Dolphin Wireless Manager**.
- 2. Tap Menu and then select Gobi Settings.
- 3. From the Setup tab, select the carrier and enter user information (GSM only).

Note: An installed SIM card is required and the SIM slot option must be set to 0.

- 4. Check the Auto Start Data Session checkbox to automatically start the data session.
- 5. Tap the Apply button. The Connection Manager automatically switches to the Status Tab.
- 6. Tap the Radio Power ON button.
- 7. When the radio connects to the network, the status changes to "Registered" and a signal strength is displayed.
- 8. If **Auto Start Data Session** was checked on the **Setup** tab, the state automatically changes from "Registered" to "Data Session Open" and an IP address appears. If **Auto Start Data Session** was not selected, then the Data session can be started manually by tapping **Start Data Session** button from the **Status** tab.



## Working with the Bluetooth Radio

## **Enabling the Bluetooth Radio**

You enable the Bluetooth radio in the Dolphin Wireless Manager (see page 8-4).

1. Tap () on the Home screen to access the **Dolphin Wireless Manager**.



2. Tap anywhere inside the Bluetooth rectangle and Bluetooth begins activating.



3. When the radio is activated (i.e., transmitting a signal), the OFF button changes to ON.



Now, the Bluetooth radio is transmitting a signal. Additional text in the Bluetooth section tells information about the Bluetooth radio. "Visible" and "Not visible" indicates whether the Bluetooth radio is discoverable or not discoverable by other Bluetooth devices.

Now, you can connect to other transmitting and discoverable Bluetooth devices (see page 10-2).

To make the terminal discoverable, see page 10-6.

## **Pairing and Trusted Devices**

The terminal does support pairing. Pairing happens during general connection setup. Paired devices are "trusted" devices. This means that there is unrestricted access to all services (including services that require authorization and authentication).

A connection can exclude pairing. A device that is connected to the terminal but not paired with it is considered an untrusted device. Content can still be passed to untrusted devices by requiring authorization with each attempt (for example, with the initialization of a file exchange).

## **Connecting to Other Bluetooth Devices**

To connect to other bluetooth devices, you need to perform a device discovery, select a discovered device, and then connect to the selected device. Pairing happens as part of the connection process.

- 1. Make sure the bluetooth device is in range and set to be discoverable by other bluetooth devices.
- 2. In the Dolphin Wireless Manager, tap **Menu > Bluetooth Settings**.

OR



3. Tap Add new device. The terminal begins searching for discoverable Bluetooth devices.



4. Select a device from the list and tap **Next**.



- 5. You are prompted to enter a passcode.
  - If the device has a specific passcode, enter it in the **Passcode** field and tap **Next**.

When attempting to connect to a printer or headset with Bluetooth capabilities, the passcode may default to either 1111 or 0000. If there is no default, consult the device literature for the number.

- If the device does not have a specific passcode, you can enter one in the **Passcode** field and tap **Next** to create a passcode.
- 6. The Bluetooth radio tries to connect with the device.



7. If you created a passcode, you will be prompted by the other device to enter the same passcode. Enter the created passcode to establish a paired connection.

If you entered a device specific passcode, you should not have to do anything on the other device.

8. When the connection is complete, a list of matching and supported services on the device appears. Only the services that are mutually supported on both devices appear in the Partnership Settings window.

Bluetooth	a 井 ୶ 🖅 7:29
Partnership Set	tings
Display Name:	ID09358D0143
Select services to	use from this device.
Dialup Netw	vorking
	Refresh
(Cancel	Save

9. Select the services you want to use and tap Save.

The services on the new devices have to be selected or the pairing won't include those services, even though the devices are paired. If services are not selected, you will be continually re-prompted for the passcode from the device.

10. The device appears in the list on the main window.

If you are connecting to a printer or headset, complete any additional steps required by the device.



11. After the passcodes have been accepted on both sides, you have a trusted (paired) connection.

## **Transferring Files**

Before attempting to transfer files, make sure the receiving Bluetooth device is in range, set to be discoverable by other devices, and set to receive incoming beams.



- 2. Navigate to the file you want to transfer.
- 3. Tap and hold on the file and select **Beam File** on the popup menu.



4. The Bluetooth radio begins searching for devices.

File Explorer	ⓐ # ◀× Œ 7:4
🜆 Grass.jpg	
To beam, select a devi	ce. On the
destination device, tur receive Bluetooth bear	m on visibility to ms.
eiii) D99EX	m on visibility to ms.
estination device, tur receive Bluetooth bear )) D99EX )) Unknown device	m on visibility to ms. Tap to send Tap to send
<ul> <li>destination device, tur receive Bluetooth bear</li> <li>D99EX</li> <li>Unknown device</li> <li>Unknown device</li> </ul>	m on visibility to ms. Tap to send Tap to send Tap to send
destination device, tui receive Bluetooth bear •))) D99EX •)) Unknown device •)) Unknown device •)) Unknown device	m on visibility to ms. Tap to send Tap to send Tap to send Tap to send

As data is retrieved, the device IDs appear in the list.

- 5. Tap the device to begin sending the selected file.
- 6. While trying to connect, the selected device reads "Pending".



7. When the file is being transferred, the selected device reads "Sending".



## Making the Terminal Discoverable

By default, the Dolphin terminal is not discoverable, which means that the terminal will not be found by other Bluetooth devices.

1. To make the terminal discoverable, tap 2 > Settings > Bluetooth 3

Note: If you are in the Dolphin Wireless Manager, tap Menu > Bluetooth Settings.

- 2. Tap Mode on the Horizontal scroll.
- 3. Select "Make this device visible to other devices" and tap OK.



### **Enabling the Terminal to Receive Incoming Beams**

By default, the 7800 terminal is not configured to receive incoming beams from other devices attemting file transfers via the Beam File command. Before initiating a file transfer from another device follow the steps below to enable Beam reception on your Dolphin terminal.

- 1. Tap 🕑 > Settings > Connections > Beam.
- 2. Select "Receive all incoming beams."
- 3. Tap **OK**.

## **Selecting COM Ports**

You can select COM ports 0-9. For more information, see 7800 COM Port Assignment Table on page 8-11.




## Overview

The Dolphin 7800 terminal contains an integrated GPS module that allows location tracking of workers and vehicles, providing better utilization of field assets. Optional mapping and navigation software provides turn-by-turn driving directions and location information.

## **Assisted GPS Support**

The operating system software does not inhibit nor explicitly support assisted GPS modes, which usually requires installing a vendor-specific client on the terminal that communicates with the GPS module. This client would then provide the almanac and/or ephemeris data for warm or hot start modes of operation, allowing a lower time to first fix (TTFS). The Client must be configured on the terminal, active, and provide the data to the GPS module through the standard COM port.

## Powering the GPS Module

The GPS module powers on automatically when accessed by a software application and powers off automatically when that software application closes. You cannot manually power on and off the GPS module.

## **Communication Ports**

There are two ways to access the GPS module: through the actual COM port (COM7) or the GPS Intermediate Driver. The method you use depends on the software application you are using. If the software application requires the actual COM Port, set the operating system to use COM7. If the software application requires the GPS Intermediate Driver, set the operating system to use the GPS Intermediate Driver.

## **Selecting the Port**

- Tap Settings > System > External GPS.
- 2. In the **GPS program port:** drop-down list, select **COM7** or **GPD1** (the GPS Intermediate Driver) as required by the application.

Note: The GPS program port and hardware port cannot be the same value.

3. Tap OK to save.

## COM7

COM Port 7 can be set to the following baud rates:

- 4800
- 9600 (Default baud rate. Recommended for optimal performance.)
- 1920038400

Other baud rates are not possible. The baud rate selected on COM7 is the actual baud rate with which the GPS communicates.

GPS Settings	a 井 ◀× 建 6:38
Access 🔇	Programs 💙 Hardware
Choose the port	that programs will use to
GPD1	
GPD2	
GPD3	
GPD4	<u> </u>
GPD5	~
	ОК

### **GPS Intermediate Driver**

When the first user of GPD1 opens the port, the GPS Intermediate Driver opens the COM7 port. The GPS Intermediate Driver allows multiple applications to open GPD1, and the GPS data is broadcast to all open ports.

When the GPSID driver is in use, the COM7 port is allocated to GPSID as READ|WRITE (COM7 is still available for access mode of 0).

For more information about Microsoft's GPS Intermediate Driver, follow this link: http://msdn.microsoft.com/en-us/library/ms850332.aspx

## **GPS Demo**

The GPS Demo demonstrates the main functionality of the integrated GPS module. The GPS Demo uses COM7.

To see the GPS Demo, tap 🚱 > Demos > GPS Demo.



## Dolphin 7800HomeBase Device (Model 7800-HB)

## Overview

The Dolphin 7800 HomeBase (Model 7800-HB) is a charging and communication cradle that supports USB Hi-Speed 2.0v communication, which enables the terminal to interface with the majority of PC-based enterprise systems. The HomeBase also contains an auxiliary battery well that charges a spare Honeywell standard or extended battery pack.

The 7800-HB charger is designed for use with battery standard pack models 7800-BTSC or 7800-BTSCW (Li-ion 3.7 V, 8.9 watt hour) and extended battery pack 7800-BTXC or 7800-BTXCW (Li-ion 3.7 V, 14.8 watt hour) manufactured for Honeywell International Inc., and with Dolphin 7800 model terminals.

Warning! The HomeBase is not designed for use in hazardous locations.

We recommend use of Honeywell peripherals, power cables, and power adapters. Use of any non-Honeywell peripherals, cables, or power adapters may cause damage not covered by the warranty.

## **Unpacking the HomeBase**

Open the shipping box and inspect the package to see that the following standard items are included:

- One Dolphin HomeBase, model 7800-HB
- One power supply (see Power on page 12-4)
- One power cord

If any items are missing or anything appears to be damaged, contact your Customer Account Representative. Keep the original packaging in case you need to return the HomeBase for service or to store the HomeBase while not in use.

#### **Optional Equipment**

A standard USB (Type A to B) cable is required when using the HomeBase for communication between the terminal and a host device.

## **Charging Overview**

The base provides power to the intelligent battery charging system in all Dolphin terminals that senses when a full charge has been achieved and switches to a trickle charge to maintain the full charge. The base completes a full charge of the main battery pack installed in the terminal seated in the terminal well in 4 hours for the standard battery or 6 hours for the extended battery. The base completes a full charge of the Auxiliary Battery Well (see page 12-2) in 4 hours for the standard battery or 6 hours for the extended battery.

Note: Before attempting to use, charge, or replace the battery in the terminal, you should read the Guidelines for Battery Pack Use and Disposal on page 3-13.

## Communications

Reliable data communications at speeds of up to 480 Mbps can be transmitted by the base through the Hi-Speed USB port.

Note: These bases cannot be physically connected to each other - sometimes referred to as "daisy-chained".

### **Convenient Storage**

The intelligent battery charging system makes this base a safe and convenient storage receptacle for your Dolphin terminal.

## Capacity

The base holds one terminal and features an auxiliary battery well behind the terminal well that can charge a battery pack independently of the terminal well. This means that one base can charge two battery packs: the one installed in the terminal and a spare.



We recommend use of Honeywell Li-ion battery packs. Use of any non-Honeywell battery may result in damage not covered by the warranty.

We recommend use of Honeywell peripherals, power cables, and power adapters. Use of any non-Honeywell peripherals, cables, or power adapters may cause damage not covered by the warranty.

## **Parts and Functions**

### **Front Panel**



#### **Terminal Well**

Place the terminal in this well to communicate with a host device, power the terminal, and charge the installed battery pack. The base completely charges the main battery in a Dolphin terminal in 4 hours for the standard battery or 6 hours for the extended battery. If the host device is a workstation that uses ActiveSync or Windows Device Mobile, synchronization begins immediately.

#### **Auxiliary Battery Well**

See Auxiliary Battery Well on page 12-3.

#### Power/Dock LED

Indicates if power is supplied to the HomeBase and if a terminal is docked properly in the base.

This color	means
Red	The HomeBase has power but no terminal is docked.
Green	The HomeBase has power and the terminal is properly seated in the base.

#### AUX Battery LED

Indicates status of the battery charging in the auxiliary battery well; see Back Panel on page 12-3.

This color	means
Orange	The auxiliary battery is charging.
Green	The auxiliary battery has completed charging and is ready for use.
Red, Flashing	The internal temperature of the auxiliary battery is too hot or there is a battery error. Charge the auxiliary battery in a cooler environment or replace the battery with a new Honeywell battery.

For information about charging a battery in the auxiliary battery well, see page 12-5.

#### COMM LED

This is the communication LED. It indicates the status of data transfer between the Dolphin terminal and the host device.

This color	means
------------	-------

**Green** A USB Connection is established with the host workstation.

#### **Back Panel**



#### **Auxiliary Battery Well**

The base enables you to charge an additional battery pack independently of the terminal well in 4 hours for the standard battery or 6 hours for the extended battery. This feature ensures that you can always have a fully-charged battery for your terminal. See Charging a Spare Battery in the Auxiliary Battery Well on page 12-5.

#### USB Port

This USB port is USB v2.0 Hi-Speed compliant. Using a USB cable, you can connect the base to a host device, such as a workstation. USB communication occurs through Microsoft ActiveSync (v4.5 or higher) or Microsoft Windows Mobile Device Center (WMDC) depending on the host workstation's operating system. When the terminal is seated in the terminal well, it is connected to the host device via the base.

Note: ActiveSync on your Dolphin terminal works with Windows Mobile Device Center on host workstations running Windows Vista or Windows 7 and with ActiveSync on host workstations running Windows XP. For detailed information on ActiveSync and WMDC visit Microsoft's Windows Mobile Web site.

#### **DC Power Jack**

See Power on page 12-4.

#### **Bottom Panel**

For details on how to mount the HomeBase, see Mounting the HomeBase on page 12-7.



#### **Power**

The base requires 12 Volts DC input for communications, battery charging, and power output to the terminal; the power adapter included with the base converts the voltage from the AC power source to 12 Volts DC. Use only a UL listed power supply, which has been qualified by Honeywell with output rated at 12VDC and 3 amps with the device. The operating temperature range is -10° to 50°C (14° to 122°F) Honeywell recommends that you leave the base connected to its power source at all times, so that it is always ready to use.

We recommend use of Honeywell peripherals, power cables, and power adapters. Use of any non-Honeywell peripherals, cables, or power adapters may cause damage not covered by the warranty.

#### **Connecting Power to the HomeBase**

- 1. Plug the A/C power cord into the power adapter.
- 2. Plug the power cable into the power connector on the back of the HomeBase.
- Plug the A/C power cord into a grounded power source. The base is now powered. The Power/ Dock LED on the HomeBase illuminates solid red to indicate the HomeBase has power and no terminal is docked.



## **Charging the Main Battery**

The base provides power to the Dolphin terminal and allows the charging of the terminal's main battery. The intelligent battery charging system incorporated into all Dolphin terminals prevents overcharging, which means that Dolphin terminals may be stored in the base indefinitely without damage to the terminals, battery packs, or the base. The base completes a full charge of the main battery pack installed in the terminal seated in the terminal well in 4 hours for the standard battery or 6 hours for the extended battery.

For more information about Honeywell battery packs and how to check battery power levels in your terminal, refer to Power (page 7-15) and Batteries (page 3-12).

## To Power a Terminal and Charge its Main Battery

- 1. Install the battery pack in the terminal; see Install the Main Battery Pack on page 2-1.
- 2. Verify the base has power. If the Power/Dock LED is not illuminated, see Connecting Power to the HomeBase on page 12-4.
- 3. Slide the terminal into the terminal well. The Power/Dock LED changes to green. The charging begins immediately if required by the Dolphin terminal.



Ensure all components are dry prior to mating terminals/batteries with peripheral devices. Mating wet components may cause damage not covered by the warranty.

We recommend use of Honeywell Li-Ion battery packs. Use of any non-Honeywell battery may result in damage not covered by the warranty.

## Charging a Spare Battery in the Auxiliary Battery Well

The auxiliary battery well located on the back of the base charges a spare battery independently of the terminal well. The Aux Battery LED on the front panel indicates the status of the battery in this well. Charge time is 4 hours for the standard battery pack or 6 hours for the extended battery pack; see Auxiliary Battery Well on page 12-3.

- 1. Insert the battery at an angle.
  - Note: Align the battery contacts with the contacts inside the auxiliary battery well.
- 2. Snap the battery into place with a hinging motion. The Aux Battery LED lights orange.
- Use the AUX Battery LED to monitor the charging progress. The LED lights green when the auxiliary battery has completed charging and is ready for use.

Note: If the AUX Battery LED flashes red, the internal



temperature of the battery is too hot or there is a battery error. Charge the auxiliary battery in a cooler environment or replace the battery with a new Honeywell Li-ion battery.

## Communication

Dolphin terminals support USB communications out of the box. The base also supports USB communications via the USB port located on the back. The base acts as a USB device by interfacing the USB signals of the Dolphin terminal to the USB of the host workstation. Using a standard USB cable, the base's USB interface allows the Dolphin terminal to communicate with a workstation.

### **Requirements**

- A base powered by a power cable and power adapter cable
- A standard USB communication cable
- A work station running Windows 98 Second Edition, Windows Me, Windows 2000, Windows NT (4.0 SP6 or higher), Windows XP, Windows Vista, or Windows 7.
- ActiveSync (v4.5 or above) or Widows Mobile Device Center on the workstation

## **Connecting the Communication Cables**

- 1. Connect power to the HomeBase (see Power on page 12-4).
- 2. Plug the USB communication cable into the back of the base.
- 3. Connect the communication cable into the back of the workstation.
- 4. At this point, the hardware is installed and operating. You may need to reboot your workstation to complete the installation process.

## **Establishing Communication**

USB communication with the terminal is usually auto-detected and configured by ActiveSync or Windows Mobile Device Center based on the communication cable connected.

## **Communicating with the Dolphin Terminal**

To initiate communications between the Dolphin terminal and peripheral, complete these steps:

- 1. Insert the Dolphin terminal into the terminal well of the base.
  - The DOCK LED illuminates green. If the DOCK LED does not illuminate, make sure that the terminal is properly seated. You may need to remove and re-insert the terminal.
  - The Dolphin terminal activates; if the power is off, the terminal automatically powers on. If the terminal does not power on, verify that the Honeywell power supply is properly connected to the cradle and plugged into a functioning outlet.
  - If the base is connected to the workstation, the Dolphin terminal automatically opens ActiveSync or the Windows Mobile Device Center to establish a connection.
- 2. The base can now transfer data between the terminal and the host device. If communication does not occur, check the port connections to ensure that the cradle is correctly configured.

## **Verifying Communication**

You can verify that the USB driver is functioning by watching the COMM LED on the USB base. When the COMM LED illuminates solid green, the base is communicating with the host device.

Note: This base cannot be daisy-chained.

## Mounting the HomeBase

Set the base on a dry, stable surface, such as a desktop or workbench near an electrical outlet. Be sure to provide enough workspace with good lighting for the user to view and operate the Dolphin terminal while it is in the base. When choosing a mounting location, bear in mind that the location must allow users' easy access to the Auxiliary Battery Well and the back panel of the HomeBase where the USB port and the power jack are located.

## **Optional Hardware Mount**

On the bottom of the HomeBase there are four mounting holes with a maximum depth of 7 mm that can be used to secure the base to a horizontal surface such as a desktop or workbench using M3 self tapping screws.





## Dolphin 7800eBase Device (Model 7800-EHB)

### **Overview**

The Ethernet Base (eBase) enables a single Dolphin 7800 computer to communicate with a host device over an Ethernet network.

The 7800-EHB charger is designed for use with standard battery pack model 7800-BTSC or 7800-BTSCW (Li-ion 3.7 V, 8.9 watt hour) and extended battery pack model 7800-BTXC or 7800-BTXCW (Liion 3.7 V, 14.8 watt hour) manufactured for Honeywell International Inc. and with Dolphin 7800 model terminals.



Warning! The eBase is not designed for use in hazardous locations.

We recommend use of Honeywell peripherals, power cables, and power adapters. Use of any non-Honeywell peripherals, cables, or power adapters may cause damage not covered by the warranty.

## Unpacking the eBase

Open the shipping box and inspect the package to see that the following standard items are included:

- One Dolphin eBase Ethernet cradle, model 7800-EHB
- One power supply (see Power on page 13-4)
- · One power cord

You will also need to provide a standard CAT-5 Ethernet network cable. These items are needed to set up and operate the eBase. If any items are missing or anything appears to be damaged, contact your Customer Account Representative.

Keep the original packaging in case you need to return the eBase for service or to store the eBase while not in use.

#### **Charging Overview**

The base provides power to the intelligent battery charging system in all Dolphin terminals that senses when a full charge has been achieved and switches to a trickle charge to maintain the full charge. The base completes a full charge of the main battery pack installed in the terminal seated in the terminal well in 4 hours for the standard battery or 6 hours for the extended battery. The base completes a full charge of the battery pack in the Auxiliary Battery Well (see page 13-2) in 4 hours for the standard battery or 6 hours for the extended battery.

Note: Before attempting to use, charge, or replace the battery in the terminal, you should read the Guidelines for Battery Pack Use and Disposal on page 3-13.



We recommend use of Honeywell Li-ion battery packs. Use of any non-Honeywell battery may result in damage not covered by the warranty.

## **Convenient Storage**

The intelligent battery charging system makes this base a safe and convenient storage receptacle for vour Dolphin terminal.

## Capacity

The base holds one terminal and features an auxiliary battery well behind the terminal well that can charge a battery pack independently of the terminal well. This means that one base can charge two battery packs: the one installed in the terminal and a spare.

## **Parts and Functions**

## **Front Panel**



#### **Terminal Well**

Place the terminal in this well to communicate with a host device, power the terminal, and charge the installed battery pack. The eBase completely charges the main battery in a Dolphin terminal in 4 hours for the standard battery or 6 hours for the extended battery.

#### Auxiliary Battery Well

See Auxiliary Battery Well on page 13-3.

#### Power/DOCK LED

Indicates if power is supplied to the eBase and if a terminal is docked properly in the base.

This color	means
Red	The eBase has power but no terminal is docked.
Green	The eBase has power and the terminal is properly seated in the base.

#### AUX Battery LED 🌡

The AUX Battery LED indicates the status of the battery charging in the auxiliary battery well; see Back Panel on page 13-3.

This color	means
Orange	The auxiliary battery is charging.
Green	The auxiliary battery has completed charging and is ready for use.

This color means...

**Red Flashing** The internal temperature of the auxiliary battery is too hot or there is a battery error. Charge the auxiliary battery in a cooler environment or replace the battery with a Honeywell battery.

#### $\mathsf{COMM} \mathsf{ LED} \rightleftarrows$

The COMM LED indicates the status of data transfer between the Dolphin terminal and the eBase.

#### **Ethernet Communication**

When the Dolphin terminal is docked:

This color	and status	means
Green	Solid	A connection has been established between the Dolphin terminal and the Ethernet.
Green	Flashing	Data transfer in progress.
USB Communication		
When the Dolphin terminal is docked:		

This color	and status	means
Red	Solid	A USB connection has been established between the Dolphin terminal and the host workstation.

#### **Back Panel**



#### **Auxiliary Battery Well**

The eBase enables you to charge an additional battery pack independently of the terminal well in 4 hours for the standard battery or 6 hours for the extended battery. This feature ensures that you can always have a fully charged battery for your terminal.

#### USB Port

This USB port is USB v2.0 Hi-Speed compliant. Using a USB cable, you can connect the eBase to a USB compliant device to facilitate USB communication to and from the terminal. USB communication occurs through Microsoft ActiveSync (v4.5 or higher) or Microsoft Windows Mobile Device Center depending on the host workstation's operating system. When the terminal is seated in the terminal well, it is connected to the peripheral device via the eBase.

Note: ActiveSync on your Dolphin terminal works with Windows Mobile Device Center on host workstations running Windows Vista or Windows 7 and with ActiveSync on host workstations running Windows XP. For detailed information on ActiveSync and Windows Mobile Device Center visit Microsoft's Windows Mobile Web site.

#### **RJ45 Ethernet Port**

Use a standard CAT-5 Ethernet cable; you can connect the ebase to an Ethernet-compliant device to facilitate Ethernet communication to and from the terminal.

This color	and status	means
Green	Flashing	Data transfer in progress.
	Solid	A connection has been established between the Dolphin terminal and the Ethernet.
Yellow	Solid	Ethernet is connected at 100T.
	Off	Ethernet is connected at 10T.

#### **DC Power Jack**

See Power, below.

#### **Bottom Panel**

For details on how to mount the eBase, see Mounting the eBase on page 13-7.

Compliance L abe

MAC Address Label \_\_\_\_\_

erial Number Label

#### **Power**

The terminal requires 12 Volts DC input for communications and battery charging; the power adapter on the power cable converts the voltage from the power source to 12 Volts DC. Use only a UL listed power supply, which has been qualified by Honeywell with output rated at 12VDC and 3 amps with the device. The operating temperature range is  $-10^{\circ}$  to  $50^{\circ}$ C (14° to 122°F). Honeywell recommends that you leave the eBase connected to its power source at all times, so that it is always ready to use.

We recommend use of Honeywell peripherals, power cables, and power adapters. Use of any non-Honeywell peripherals, cables, or power adapters may cause damage not covered by the warranty.

### **Connecting Power to the eBase**

- 1. Plug the A/C power cord into the power adapter.
- 2. Plug the power cable into the power connector on the back of the eBase.
- 3. Plug the A/C power cord into a grounded power source. The Power/Dock LED on the eBase illuminates solid red to indicate the eBase has power and no terminal is docked.



The base provides power to the Dolphin terminal and allows the charging of the terminal's main battery. The intelligent battery charging system incorporated into all Dolphin terminals prevents overcharging, which means that Dolphin terminals may be stored in the base indefinitely without damage to the terminals, battery packs, or the base. The base completes a full charge of the main battery pack installed in the terminal seated in the terminal well in 4 hours for the standard battery or 6 hours for the extended battery.

For more information about Honeywell battery packs and how to check battery power levels in your terminal, refer to Power (page 7-15) and Batteries (page 3-12).

## To Power a Terminal and Charge its Main Battery

- 1. Install the battery pack in the terminal; see Install the Main Battery Pack on page 2-1.
- 2. Verify the base has power. If the Power/Dock LED is not illuminated, see Connecting Power to the eBase on page 13-5.
- 3. Slide the terminal into the terminal well. The Power/Dock LED changes to green. Battery charging begins immediately if required by the Dolphin terminal.
- Ensure all components are dry prior to mating terminals/batteries with peripheral devices. Mating wet components may cause damage not covered by the warranty.

We recommend use of Honeywell Li-Ion battery packs. Use of any non-Honeywell battery may result in damage not covered by the warranty.

## Charging a Spare Battery in the Auxiliary Battery Well

The auxiliary battery well located on the back of the base charges a spare battery independently of the terminal well. The Aux Battery LED on the front panel indicates the status of the battery in this well. Charge time is 4 hours for the standard battery pack or 6 hours for the extended battery pack; see Auxiliary Battery Well on page 13-3.





- 1. Insert the battery at an angle.
  - Note: Align the battery contacts with the contacts inside the auxiliary battery well.
- 2. Snap the battery into place with a hinging motion. The Aux Battery LED lights orange.
- 3. Use the AUX Battery LED to monitor the charging progress. The LED lights green when the auxiliary battery has completed charging and is ready for use.
  - Note: If the AUX Battery LED flashes red, the internal temperature of the battery is too hot or there is a battery error. Charge the auxiliary battery in a cooler environment or replace the battery with a new Honeywell Li-ion battery.



## Communication

#### **Software Requirements**

Before you connect the Dolphin terminal to the eBase, make sure you have the most current software installed. To check the terminal's system information, tap  $\textcircled{}{} > Power Tools > SysInfo$ .

Applications on the Dolphin Terminal

Applications running on the Dolphin terminal when it is connected to the eBase should be designed specifically for a partially connected network. For more details, please refer to the Best Practices for Partially Connected Networks document available at www.honeywellaidc.com.

## **Establishing Ethernet Communication**

Connecting the Dolphin Terminal to the eBase

By default, the Dolphin terminal is configured to obtain IP addresses automatically via DHCP server. This means that in most cases you would simply plug-and-play the unit.

- 1. Verify the base has power. If the Power/Dock LED is not illuminated, see Connecting Power to the eBase on page 13-5.
- 2. Plug the CAT-5 Ethernet cable into the RJ45 connector on the back of the eBase.
- 3. Plug the Ethernet cable into the network.
- 4. Insert the Dolphin into the terminal well. The DOCK LED for the well changes from red to green and the connection icon on the Dolphin's title bar changes from ← to *t*.
  - Note: Instead of using the default for DHCP assigned IP addresses, the Dolphin terminal can use a statically assigned IP address. See standard Microsoft Windows Mobile documentation for how to assign a static IP address to a network adapter. In this case, set a static IP address for the adapter named "SMC95001 USB2.0 FAST Ethernet Drive".

Displaying the eBase and Terminal IP Address

Once the Dolphin terminal has been successfully connected to the eBase, the terminal uses the eBase IP address. This IP address can be used by any application on the Dolphin terminal.

- 1. Tap 🕢 > Power Tools > Network Utilities > IPConfig.
- 2. Change the Adapter to SMC95001.
- 3. On the Input tab, tap the **Display full configuration** button.
- 4. The Dolphin terminal retrieves and displays the IP configuration for the entire terminal and eBase. Locate the **IpAddress** field in the IP configuration list.

#### **Establishing USB Communication**

Dolphin terminal's support USB communication out of the box. The eBase also supports USB communications using the USB port located on the back panel of the eBase. The eBase acts as a USB device by interfacing the USB signals of the Dolphin terminal to the USB of the host workstation. Using a standard USB cable, the ebase's USB interface allows the Dolphin terminal to communicate with a host workstation.

Setting Up and Connecting the Dolphin Terminal to the eBase

- 1. Verify the base has power. If the Power/Dock LED is not illuminated, see Connecting Power to the eBase on page 13-5.
- 2. Plug the USB communication cable into the USB port on the back of the eBase.

Note: The Dolphin terminal should always be removed from the eBase when connecting or disconnecting the USB cable.

- 3. Connect the other end of the USB cable to the host workstation.
- 4. Insert the Dolphin terminal in the eBase terminal well. The Power/Dock LED changes to green and the COMM LED illuminates red.
- 5. The Dolphin terminal activates and automatically opens ActiveSync to establish a connection.
- 6. The connection icon in the Dolphin's navigation bar changes from 式 to 🚅 it indicate a successful connection. The eBase can now transfer data between the terminal and the host device.

## Mounting the eBase

Set the eBase on a dry, stable surface, such as a desktop or workbench near an electrical outlet. Be sure to provide enough workspace with good lighting for the user to view and operate the Dolphin terminal while it is in the eBase.

When choosing a mounting location, bear in mind that the location must allow users' easy access to the Auxiliary Battery Well and the back panel of the HomeBase where the USB port, Ethernet port, and the power jack are located.

## **Optional Hardware Mount**

On the bottom of the HomeBase there are four mounting holes with a maximum depth of 7 mm that can be used to secure the base to a horizontal surface such as a desktop or workbench using M3 self tapping screws.





## Dolphin 7800Mobile Base Device (Model 7800-MB)

## Overview

The Dolphin Mobile Base charging cradle is designed specifically for in-premise and in-transit data collection applications. The base features a mounting bracket and a cigarette lighter adapter to adapt it to your environment.

The 7800-MB charger is designed for use with Dolphin 7800 model terminals using standard battery pack model 7800-BTSC or 7800-BTCW (Li-ion 3.7 V, 8.9 watt hour) or extended battery pack model 7800-BTXC or 7800-BTXCW (Li-ion 3.7 V, 14.8 watt hour) manufactured for Honeywell International Inc.



Warning! The Mobile Base is not designed for use in hazardous locations.

We recommend use of Honeywell peripherals, power cables, and power adapters. Use of any non-Honeywell peripherals, cables, or power adapters may cause damage not covered by the warranty.

## **Charging Overview**

The base provides power to the intelligent battery charging system in all terminals that senses when a full charge has been achieved and switches to a trickle charge to maintain the full charge. The base completes a full charge of the main battery pack in 4 hours for the standard battery pack or 6 hours for the extended battery pack.

Note: Before attempting to use, charge, or replace the battery in the terminal, you should read the Guidelines for Battery Pack Use and Disposal on page 3-13.

We recommend use of Honeywell Li-Ion battery packs. Use of any non-Honeywell battery may result in damage not covered by the warranty.

## **Convenient Storage**

Intelligent battery charging makes the base a safe and convenient storage receptacle for your Dolphin terminal.

## **Mobile Base Components**



#### **Mounting Back Plate**

Used to mount the base to a fixed location.

#### **Terminal Locking Lever**

The mobile base has a locking lever on the front. When the lever is in the down position the terminal in locked in the base. To unlock the terminal push the lever up.

#### **Terminal Well**

Place the terminal in this well to charge the main battery pack.

#### **Power Adapter**

The mobile charger is equipped with a car adapter cable that can be connected to a vehicle cigarette lighter outlet.

UL listed power supply Input: 9V-24VDC, 3.2A Output: 5VDC 3000mA

Verify that the power source is always within the specified range and observe correct input voltage polarity. An improper input voltage range or reverse polarity could damage the power conversion circuitry.

## **Back Panel and Mounting Brackets**



#### **Ball Joints**

There are two ball joints: one that is attached to back of the base and one on the mounting bracket. Both ball joints are inserted into the bracket and secured to mount the base.

#### **Pivot Bracket**

The bracket contains the turnscrew and two slots. Ball joints are inserted into each slot and secured with the turnscrew.

#### Turnscrew

The turnscrew is located on the side of the pivot bracket. Rotate the turnscrew to secure or loosen the ball joint slots.

#### **Mounting Bracket**

The mounting bracket is what you attach to the mounting surface. It is comprised of a ball joint and flat disk. The disk contains drill holes you use to secure the base to the mounting surface.

### Mounting

The adjustable mounting bracket holds the terminal securely in place and gives the user a variety of options for mounting the base.

#### **Safety Precautions**

Honeywell is not responsible for any damages caused to you, your vehicle, or other individuals due to the installation of the Dolphin Mobile mount.

Follow these safety precautions when mounting the mobile base:



Never drill into a surface in your vehicle without first consulting a mobile installation professional experienced with your vehicle type to avoid damaging the vehicle's safety features, gas tank, electrical system or other sensitive vehicle components.

- Do not install the Mobile base in an air bag deployment zone. Honeywell assumes no responsibility of liability for injury or death because of car crashes and/or air bag deployment.
- $\triangle$  Do not mount the base in a location where it prevents safe operation of the vehicle and/or impedes the vehicle operator's field of view.
- Do not mount the base in a location where the connectors on the bottom panel of the base are not easily accessible. Be sure to leave enough room for unrestricted cable connections.
- The Mobile base is intended for use in an enclosed space protected from the elements. Do not mount the Mobile base on external vehicle surfaces.
- Select a mounting surface that is flat and smooth like the console area in the vehicle located between the seats.

## Installation

Mounting hardware is not included. You must provide the appropriate hardware for your particular application and vehicle type. To ensure a safe installation, consult a mobile installation professional experienced with your vehicle type.

- 1. Using the bracket as a template, mark the locations for the mounting screws.
- 2. Drill the appropriate size pilot holes in the mounting surface.
- 3. Secure the mounting bracket to the mounting surface using the appropriate screw type for your application and vehicle type.



- 4. Loosen the turnscrew.
- 5. Insert the ball joint of the mounting bracket to the back of the bracket.
- 6. Insert the ball joint on the back of the base into the other side of the bracket.
- 7. Tighten the turnscrew to secure both ball joints.

## **Charging the Main Battery**

The mobile base provides power to the Dolphin and allows charging of the main batteries in the terminal. The main battery charges in 4 hours for the standard battery or 6 hours for the extended battery. The intelligent battery charging system incorporated into all Dolphin terminals prevents overcharging, which means that terminal may be seated in the base indefinitely without damage to the terminal, battery pack, or the base.

For more information about Honeywell battery packs and how to check battery power levels in your terminal, refer to Power (page 7-15) and Batteries (page 3-12).

## To Power a Terminal and Charge its Main Battery

Ensure all components are dry prior to mating terminals/batteries with peripheral devices. Mating wet components may cause damage not covered by the warranty.

We recommend use of Honeywell Li-Ion battery packs. Use of any non-Honeywell battery may result in damage not covered by the warranty.

1. Install the main battery pack in the terminal; see Install the Main Battery Pack on page 2-1.

- 2. Plug the power adapter into the vehicle power outlet (e.g., cigarette lighter outlet).
- 3. Lift the base locking latch up.
- 4. Slide the Dolphin into the terminal well and lower the locking latch. Charging begins immediately if required by the Dolphin terminal.





## Dolphin 7800ChargeBase Device (Model 7800-CB)

## **Overview**

The 7800 ChargeBase is a 4-slot charging cradle that can power 4 Dolphin terminals, and charge their main batteries in 4 hours for the standard battery or 6 hours for the extended battery.

The 7800-CB charger is designed for use with Dolphin 7800 model terminals using one of the following battery pack models: standard battery pack model 7800-BTSC (Li-ion 3.7 V, 8.9 watt hour), extended battery pack model 7800-BTXC, or extended pack model 7800BTXCW (Li-ion 3.7 V, 14.8 watt hour) manufactured for Honeywell International Inc.





We recommend use of Honeywell peripherals, power cables, and power adapters. Use of any non-Honeywell peripherals, cables, or power adapters may cause damage not covered by the warranty.

## Unpacking the ChargeBase

Open the shipping box and inspect the package to see that the following standard items are included:

- One Dolphin ChargeBase, model 7800-CB
- One power supply (see Power on page 15-3)
- One power cord

These items are needed to operate the ChargeBase. If any items are missing or anything appears to be damaged, contact your Customer Account Representative. Keep the original packaging in case you need to return the ChargeBase for service or to store the ChargeBase while not in use.

#### **Charging Overview**

The base supplies power to the intelligent battery charging system in all Dolphin terminals, which senses when a full charge has been achieved and switches to a trickle charge to maintain the full charge.

As battery packs charge, the charging circuitry follows the two-step charging process (CC-CV) that is recommended for the battery type. The process monitors changes in temperature, current, and voltage. The main battery of each terminal charges in 4 hours for the standard battery or 6 hours for the extended battery.

Note: Before attempting to use, charge, or replace the battery in the terminal, you should read the Guidelines for Battery Pack Use and Disposal on page 3-13.

#### **Convenient Storage**

Intelligent battery charging makes this base a safe and convenient storage receptacle for your Dolphin terminal.

## Capacity

The base can hold up to 4 Dolphin terminals. Each charging well charges each terminal independently of the other wells.



We recommend use of Honeywell Li-Ion battery pack. Use of any non-Honeywell battery may result in damage not covered by the warranty.

## **Parts and Functions**

## **Front Panel**



#### **Terminal Wells**

The base contains four terminal wells. Each well has its own dedicated Power/Docking LED and Charging LED indicator.

#### Power/Dock LEDs

The Power/Dock LED indicates if the ChargeBase has power and if the terminal is properly seated in the terminal well. Each terminal well has its own dedicated Power/Dock LED.

This color	means
Red	The ChargeBase has power but no terminal is docked.
Green	The ChargeBase has power and the terminal is properly seated in the well facilitating communication between the base and terminal

#### Charge LEDs

Each terminal well has a dedicated Charge LED located on the front of the base. When a Dolphin is docked in a terminal well, the Charge LED illuminates green to indicate power is being applied to the Dolphin. The Battery Icon in the Dolphin window indicates the

terminal is running on external power. If a battery pack is installed, the battery is charging in the background.

When the Dolphin is removed from the base, the battery icon indicates the charge level of the main battery pack, see lcons in the Title Bar on page 2-5. For additional information on how to check the power levels of the main battery pack and the backup battery, while the terminal is docked, see Checking Battery Power on page 3-15.

For details on how to charge the terminal using the ChargeBase, see Charging the Main Battery on page 15-4.

**Back Panel** 



#### **Power Supply Connector**

This connector receives input from the power adapter. Plug the power connector cable from the power adapter into this connector.

### Power

The terminal requires 12 Volts DC input for battery charging; the power adapter on the power cable converts the voltage from the power source to 12 volts DC. Use only a UL Listed power supply, which has been qualified by Honeywell with output rated at 12VDC and 8.5 amps with the device. The operating temperature range is  $-10^{\circ}$  to  $45^{\circ}$ C ( $14^{\circ}$  to  $113^{\circ}$ F).

Honeywell recommends that you leave the ChargeBase connected to its power source at all times, so that it is always ready to use.

We recommend use of Honeywell peripherals, power cables, and power adapters. Use of any non-Honeywell peripherals, cables, or power adapters may cause damage not covered by the warranty.

## **Connecting Power to the ChargeBase**

- 1. Plug the A/C power cord into the power adapter.
- 2. Plug the power connector cable into the power connector on the back panel of the ChargeBase.
- 3. Plug the A/C power cord into a standard wall outlet. The LED on the Power Adapter illuminates to indicate power.
- 4. All of the Power/Dock LEDs illuminate red to indicate the base has power. Terminal wells with properly docked Dolphins indicate power with a green LED.
- 5. The base is ready to begin charging terminals.



## **Charging the Main Battery**

The base provides power to the Dolphin terminal(s) and allows charging of the main batteries in the terminals. The main battery of each terminal charges in 4 hours for the standard battery or 6 hours for the extended battery. The intelligent battery charging system incorporated into all Dolphin terminals prevents overcharging, which means that Dolphin terminals may be seated in the base indefinitely without damage to the terminals, battery packs, or the base.

For more information about Honeywell battery packs and how to check battery power levels in your terminal, refer to Power (page 7-15) and Batteries (page 3-12).



## To Power a Terminal and Charge its Main Battery

- 1. Install the main battery pack in the terminal; see Install the Main Battery Pack on page 2-1.
- 2. Verify the base has power. If the Power/Dock LEDs are not illuminated, see Connecting Power to the ChargeBase on page 15-3.
- 3. Slide the Dolphin terminal into one of the four terminal wells. The Power/Dock LED for the well changes to green. Charging begins immediately if required by the Dolphin terminal.
- Ensure all components are dry prior to mating terminals/batteries with peripheral devices. Mating wet components may cause damage not covered by the warranty.
- $\bigtriangleup$  We recommend use of Honeywell Li-Ion battery packs. Use of any non-Honeywell battery may result in damage not covered by the warranty.

## Mounting the ChargeBase

This base should be mounted to a dry, stable surface. When choosing a location, always bear in mind that:

- The mounting location must allow users easy access to the power connector.
- The base should be oriented so that users can easily see the LEDs.

## **Bottom Panel**



## **Desk Mounting**

The DIN Rail (7.5 X 35 mm) slot on the bottom panel enables secure mounting on a horizontal surface.

#### Hardware Required

- 3/16 in. dia x 5/8 in. long pan head screw
- 1/2 in. OD x 7/32 in. ID x 3/64 in. thick
- 3/16 in. dia nut

### Installing the DIN Rail

1. Slide the DIN Rail into the DIN Rail slot on the bottom panel of the base.



- 2. Turn the base and DIN Rail right side up.
- 3. Then, using the appropriate nuts and bolts, secure the DIN Rail to a stable, flat horizontal surface.





## Dolphin 7800NetBase Device (Model 7800-NB)

## **Overview**

The Net Base enables up to four Dolphin 7800 mobile computers to communicate with a host device over an Ethernet network. In addition, the Net Base provides a second RJ45 Ethernet port for connection to an additional device such as a printer, workstation, eBase, or another Net Base.

The 7800-NB charger is designed for use with Dolphin 7800 model terminals using standard battery pack model 7800-BTSC (Li-ion 3.7 V, 8.9 watt hour) or extended battery pack model 7800-BTXC (Li-ion 3.7 V. 14.8 watt hour), manufactured for Honeywell International Inc.

Warning! The Net Base is not designed for use in hazardous locations. 

We recommend use of Honeywell peripherals, power cables, and power adapters. Use of any non-Honeywell peripherals, cables, or power adapters may cause damage not covered by the warranty.

## **Unpacking the Net Base**

Open the shipping box and inspect the package to see that the following standard items are included:

- One Dolphin Net Base Ethernet cradle, model 7800-NB
- One power supply (see Power on page 16-4)
- One power cord

You will also need to provide a standard CAT-5 Ethernet network cable. These items are needed to set up and operate the Net Base. If any items are missing or anything appears to be damaged, contact your Customer Account Representative.

Keep the original packaging in case you need to return the Net Base for service or to store the Net Base while not in use.

## **Charging Overview**

The base supplies power to the intelligent battery charging system in all Dolphin terminals, which senses when a full charge has been achieved and switches to a trickle charge to maintain the full charge.

As battery packs charge, the charging circuitry follows the two-step charging process (CC-CV) that is recommended for the battery type. The process monitors changes in temperature, current, and voltage. The main battery of each terminal charges in 4 hours for the standard battery or 6 hours for the extended battery.

#### **Convenient Storage**

Intelligent battery charging makes this base a safe and convenient storage receptacle for your Dolphin terminal.

## Capacity

The base can hold up to 4 Dolphin terminals. Each charging well charges each terminal independently of the other wells.



We recommend use of Honeywell Li-ion battery packs. Use of any non-Honeywell battery may result in damage not covered by the warranty.

## **Parts and Functions**

## **Front Panel**



#### **Terminal Wells**

The Net Base contains four terminal wells. Each well has its own dedicated Power/Dock LED and COMM LED indicator.

Place the Dolphin terminal in any one of the four wells to communicate with a host device, power the terminal, and charge the installed battery pack. The Net Base completely charges the main battery in a Dolphin terminal in 4 hours for the standard battery or 6 hours for the extended battery.

#### Power/DOCK LED

Indicates if power is supplied to the Net Base and if a terminal is docked properly in the terminal well. Each terminal well has its own dedicated Dock LED.

Red The Net Base has power but no terminal is docked.

Green The Net Base has power and the terminal is properly seated in the base.

#### $\mathsf{COMM} \mathsf{ LED} \rightleftarrows$

The COMM LED indicates the status of connection and data transfer between the Dolphin terminal and the Net Base. Each terminal well has its own dedicated COMM LED.

When the Dolphin terminal is docked:

This color	and status	means
Green	Solid	A connection has been established between the Dolphin terminal and the Net Base.
Green	Flashing	Data transfer in progress.

Note: The COMM LED does not necessrily indicate the Net Base and terminal are connected to a valid Ethernet link. For more information, see RJ45 Ethernet Ports on page 16-3.

**Back Panel** 



#### **DC Power Jack**

This connector receives input from the power adapter. Plug the power connector cable from the power adapter into this connector, see Power on page 16-4.

#### **RJ45 Ethernet Ports**

The Net Base contains two RJ45 Ethernet ports. You can connect the Net Base to an Ethernetcompliant device to facilitate Ethernet communication to and from the terminal by plugging a standard CAT-5 Ethernet cable into one of the two Ethernet ports provided. The second RJ45 Ethernet port can be used for connection to an additional device such as a printer, workstation, eBase, or another Net Base.

- Note: The Net Base does not use a Spanning Tree Protocol (STP). When both RJ45 Ethernet ports are used, do not connect both Net Base interfaces to the same layer 2 LAN.
- Note: Ethernet Port 2 only supports 100Mbps Ethernet connections. Plugging in a 10Mbps connection into Port 2 may cause other ports to stop working. For 10Mbps connections use Ethernet Port 1.

Each Ethernet port has a dedicated green and yellow status LED.

This color	and status	means
Green	Flashing	Data transfer is in progress.
	Solid	A connection has been established between the Net Base and the Ethernet.
Yellow	Solid	Ethernet is connected at 100T.
	Off	Ethernet is connected at 10T.

Note: The terminal and Ethernet link must be set up properly to allow the terminal to communicate to other devices and/or the Internet. For more information, see Connecting the Dolphin Terminal to the Net Base on page 16-6.

## **Bottom Panel**

For details on how to mount the Net Base, see Mounting the Net Base on page 16-6.



## Power

The terminal requires 12 Volts DC input for communications and battery charging; the power adapter on the power cable converts the voltage from the power source to 12 volts DC. Use only a UL Listed power supply with output rated 12VDC, 8.5A with the device, which has been qualified by Honeywell. The operating temperature range is -10° to  $45^{\circ}$ C (14° to 113°F).

Honeywell recommends that you leave the Net Base connected to its power source at all times, so that it is always ready to use.

We recommend use of Honeywell peripherals, power cables, and power adapters. Use of any non-Honeywell peripherals, cables, or power adapters may cause damage not covered by the warranty.

## **Connecting Power to the Net Base**



- 1. Plug the A/C power cord into the power adapter.
- 2. Plug the power connector cable into the power connector on the back of the Net Base.
- 3. Plug the A/C power cord into a standard wall outlet. The LED on the Power Adapter illuminates to indicate power.
- 4. All four Power/Dock LEDs illuminate solid red to indicate the base has power. Terminal wells with properly docked Dolphins indicate power with a green LED.
- 5. The base is ready to begin charging terminals.

## **Charging the Main Battery**

The base provides power to the Dolphin terminals and allows the charging of the main batteries in the terminals. The main battery of each terminal charges in 4 hours for the standard battery or

6 hours for the extended battery. The intelligent battery charging system incorporated into all Dolphin terminals prevents overcharging, which means that Dolphin terminals may be stored in the base indefinitely without damage to the terminals, battery packs, or the base.

For more information about Honeywell battery packs and how to check battery power levels in your terminal, refer to Power (page 7-15) and Batteries (page 3-12).

## To Power a Terminal and Charge its Main Battery



- 1. Verify the main battery pack is installed in the terminal and the battery lock is engaged, see Install the Main Battery Pack on page 2-1.
- 2. Verify the base has power. If the Power/Dock LEDs are not illuminated, see Connecting Power to the Net Base on page 16-4.
- 3. Slide the Dolphin terminal into one of the four terminal wells. The Power/Dock LED for the well changes to green. Charging begins immediately if required by the Dolphin terminal.
- Ensure all components are dry prior to mating terminals/batteries with peripheral devices. Mating wet components may cause damage not covered by the warranty.
- We recommend use of Honeywell Li-Ion battery packs. Use of any non-Honeywell battery may result in damage not covered by the warranty.

## Communication

## **Software Requirements**

Before you connect the Dolphin terminal to the Net Base, make sure you have the most current software installed. To check the terminal's system information, tap  $\textcircled{}{}$  > **Power Tools** > **SysInfo**.

#### Applications on the Dolphin Terminal

Applications running on the Dolphin terminal when it is connected to the Net Base should be designed specifically for a partially connected network. For more details, please refer to the Best Practices for Partially Connected Networks document available at www.honeywellaidc.com.

## Connecting the Dolphin Terminal to the Net Base

By default, the Dolphin terminal is configured to obtain IP addresses automatically using a DHCP server. This means that in most cases, you would simply plug-and-play the unit.

- 1. Verify the base has power. If the Power/Dock LEDs are not illuminated, see Connecting Power to the Net Base on page 16-4.
- 2. Plug the CAT-5 Ethernet cable into one of the RJ45 connectors on the back of the Net Base.
- 3. Plug the Ethernet cable into the network.
- 4. Insert the Dolphin into one of the terminal wells. The DOCK LED for the well changes from red to green and the connection icon on the Dolphin's title bar changes from ← to ∠.
- 5. By default, the DHCP server assigns a unique IP address to each of the Dolphin terminals docked in the Net Base. This IP address can be used by any application on the Dolphin terminal.
- Note: Instead of using the default for DHCP assigned IP addresses, the Dolphin terminal can use a statically assigned IP address. See standard Microsoft Windows Mobile documentation for how to assign a static IP address to a network adapter. In this case, set a static IP address for the adapter named "SMC95001 USB2.0 FAST Ethernet Drive".

#### Displaying the Net Base Terminal Well and Dolphin IP Address

Once the Dolphin terminal establishes communication, it uses the unique IP address assigned to the terminal well it is docked in on the Net Base. If four Dolphin terminals are successfully connected, then four different IP addresses are assigned to the adapter associated with the Dolphin terminal.

- 1. Tap 🚱 > Power Tools > Network Utilities > IPConfig.
- 2. Change the Adapter to SMC95001.
- 3. On the Input tab, tap the **Display full configuration** button.
- 4. The Dolphin terminal retrieves and displays the IP configuration for the entire Dolphin terminal and the Net Base terminal well where the Dolphin is docked.
- 5. Locate the **IpAddress** field in the IP configuration list.

## Mounting the Net Base

Set the Net Base on a dry, stable surface, such as a desktop or workbench near an electrical outlet. Be sure to provide enough workspace with good lighting for the user to view and operate the Dolphin terminal while it is in the Net Base. When choosing a location, bear in mind that the mounting location must allow users easy access to the terminal wells, the Ethernet ports, and the power jack.
### **Bottom Panel**



### **Desk Mounting**

The DIN Rail (7.5 X 35 mm) slot on the bottom panel enables secure mounting on a horizontal surface.

#### Hardware Required

- 3/16 in. dia x 5/8 in. long pan head screw
- 1/2 in. OD x 7/32 in. ID x 3/64 in. thick
- 3/16 in. dia nut

#### Installing the DIN Rail

1. Slide the DIN Rail into the DIN Rail slot on the bottom panel of the base.



2. Turn the base and DIN Rail right side up.

3. Then, using the appropriate nuts and bolts, secure the DIN Rail to a stable, flat horizontal surface.





## Dolphin 7800QuadCharger Device (Model 7800-QC)

## Overview

This 4-slot charging station provides intelligent battery management for the rechargable battery packs used in Dolphin terminals.

The 7800-QC charger is designed for use with standard battery pack model 7800-BTSC or 7800-BTSCW (Li-ion 3.7 V, 8.9 watt hour) and extended battery pack model 7800-BTXC or 7800-BTXCW (Li-ion 3.7 V, 14.8 watt hour) manufactured for Honeywell International Inc.



We recommend use of Honeywell peripherals, power cables, and power adapters. Use of any non-Honeywell peripherals, cables, or power adapters may cause damage not covered by the warranty.

## Unpacking the QuadCharger

Open the shipping box and inspect the package to see that the following standard items are included:

- One QuadCharger, model 7800-QC
- One power supply (see Power on page 17-3)
- One power cord

These items are needed to operate the QuadCharger. If any items are missing or anything appears to be damaged, contact your Customer Account Representative. Keep the original packaging in case you need to return the HomeBase for service or to store the HomeBase while not in use.

## **Charging Overview**

Each charging slot works independently of the other three. As battery packs charge, the charging circuitry follows the two-step charging process (CC-CV) that is recommended for the battery type. The process monitors changes in temperature, current, and voltage and resets the battery pack. Charge time is 4 hours for the standard battery or 6 hours for the extended battery.

Note: Before attempting to use, charge, or replace the battery in the terminal, you should read the Guidelines for Battery Pack Use and Disposal on page 3-13.

### Capacity

The charger holds 4 Honeywell standard or extended batteries.

We recommend use of Honeywell Li-Ion battery packs. Use of any non-Honeywell battery may result in damage not covered by the warranty.

## **Parts and Functions**

### **Top Panel**



#### **Charging Slots**

There are four charging slots. Each slot holds one battery and charges it independently of the other slots. Charging immediately begins when a battery is placed in a slot.

#### **Power LED**

The power LED indicates if the QuadCharger is powered. When the QuadCharger is receiving power, the LED illuminates green.

#### **Power Supply Connector**

You attach the power supply to this connector. See Power on page 17-3.

#### **Status LEDs**

Each of the four battery slots has a dedicated status LED. The color of the LED indicates the charge status of the battery in the slot.

Color	This color indicates that the battery in the slot	
Green (Solid)	Has completed its charge cycle and is ready for use.	
Orange (Solid)	Is being charged at a maximum charge rate.	
Red (Flashing)	The internal temperature of the auxiliary battery is too hot or there is a battery error. Charge the auxiliary battery in a cooler environment or replace the battery with a new Honeywell battery.	
	For more information, see Troubleshooting on page 17-5.	

## Power

The charger must be connected to a power source via the Honeywell power adapter cable so that voltage is adjusted appropriately. Use only a UL listed power supply, which has been qualified by Honeywell with output rated at 12VDC and 3 amps with the device.

- 1. Plug the AC power cord into the power adapter.
- 2. Plug the power cable into the power connector on the back of the charger.
- 3. Plug the AC power cord into a grounded power source.
- 4. The power LED illuminates green, and the charger performs a self-diagnostic test that lasts approximately five seconds.

### **Recommendations for Storing Batteries**

To maintain top performance from batteries, avoid storing batteries outside of the following temperature ranges:

- 14 °F to 113 °F (-10 °C to +45 °C) for short term storage of less than one month
- 32 °F to 86 °F (-0 °C to +30 °C) for long term storage

Do not store batteries in extremely high humidity. For prolonged storage, do not keep batteries stored in a charger that is connected to a power source.

## **Inserting and Charging Batteries**

For best results, battery packs should be at room temperature before recharging them; temperature has a marked effect on charging. The recommended temperature range is 50 °F to 95 °F (10 °C to 35 °C).

- Ensure all components are dry prior to mating terminals/batteries with peripheral devices. Mating wet components may cause damage not covered by the warranty.
- We recommend use of Honeywell Li-ion battery packs. Use of any non-Honeywell battery may result in damage not covered by the warranty.
- 1. Connect power to the charger, see Power above.
- 2. Insert the battery at an angle.
  - Note: Align the battery contacts with the contacts inside the QuadCharger battery well.
- 3. Snap the battery into place with a hinging motion.
- 4. The Status LED for that particular slot illuminates orange to indicate the battery is seated properly and the charging cycle has begun.



5. When the Status LED turns green, the battery in the slot has completed charging.



## Mounting the QuadCharger

The charger should be located on a dry, stable surface and can be mounted on a flat, horizontal surface such as a desktop or workbench. When choosing a location, always bear in mind that:

- the mounting location must allow users easy access to the power connector.
- the charger should be oriented so that users can easily insert and remove battery packs and see the status LEDs.

### **Optional Hardware Mount**

#### **Bottom Panel**



Optional Mounting Holes			
Option	Size	Qty.	
A	6 mm [0.24 in.] Dia. thru hole for #6 Flat Head Phillips Dry- wall-to-Wood Screws	2	
В	Mounting holes for M3 self tapping screws, maximum thread depth of 7 mm	4	

## Troubleshooting

If you encounter problems with your QuadCharger device, refer to chart below for possible solutions. If problems persist, please contact Honeywell Technical Support.

Problem	Issue
The Status LED does not come on when I insert a battery pack.	Check the power connections; make sure the Power cable is inserted into the Power supply connector and the battery pack is properly seated.
The Status LED lights red during charging.	Try to charge the battery in one of the other charging slots. If the red Status LED comes on again, then the problem is associated with the battery pack. If the red status stays with the charging slot, the problem is associated with the charging circuitry.
The Status LED flashes red without a battery in the charging slot.	If a battery is in failuare mode (flashing red LED), and that battery is removed from the charging slot, the slot does not reset and will continue to flash red. To reset the slot and stop the flashing red LED, insert a known good battery into the slot or recycle the power to the QuadCharger.



## **Customer Support**

## **Product Service and Repair**

Honeywell International Inc. provides service for all its products through service centers throughout the world. To obtain warranty or non-warranty service, contact the appropriate location below to obtain a Return Material Authorization number (RMA #) before returning the product.

#### **North America**

Telephone: (800) 782-4263 E-mail: hsmnaservice@honeywell.com

#### Latin America

Telephone: (803) 835-8000 Telephone: (800) 782-4263 Fax: (239) 263-9689 E-mail: laservice@honeywell.com

#### Brazil

Telephone: +55 (11) 5185-8222 Fax: +55 (11) 5185-8225 E-mail: brservice@honeywell.com

#### Mexico

Telephone: 01-800-HONEYWELL (01-800-466-3993) Fax: +52 (55) 5531-3672 E-mail: mxservice@honeywell.com

#### Europe, Middle East, and Africa

Telephone: +31 (0) 40 2901 633 Fax: +31 (0) 40 2901 631 E-mail: euroservice@honeywell.com

#### Hong Kong

Telephone: +852-29536436 Fax: +852-2511-3557 E-mail: apservice@honeywell.com

#### Singapore

Telephone: +65-6842-7155 Fax: +65-6842-7166 E-mail: apservice@honeywell.com

#### China

Telephone: +86 800 828 2803 Fax: +86-512-6762-2560 E-mail: apservice@honeywell.com

#### Japan

Telephone: +81-3-6730-7344 Fax: +81-3-6730-7222 E-mail: apservice@honeywell.com

### **Online Product Service and Repair Assistance**

You can also access product service and repair assistance online at www.honeywellaidc.com.

For ongoing and future product quality improvement initiatives, the 7800 comes equipped with an embedded device lifetime counter function. Honeywell may use lifetime counter data for future statistical reliability analysis as well as ongoing quality, repair and service purposes.

### **Technical Assistance**

If you need assistance installing or troubleshooting your device, please call your distributor or the nearest technical support office:

#### North America/Canada

Telephone: (800) 782-4263 E-mail: hsmnasupport@honeywell.com

#### Latin America

Telephone: (803) 835-8000 Telephone: (800) 782-4263 E-mail: hsmlasupport@honeywell.com

#### Brazil

Telephone: +55 (11) 5185-8222 Fax: +55 (11) 5185-8225 E-mail: brsuporte@honeywell.com

#### Mexico

Telephone: 01-800-HONEYWELL (01-800-466-3993) E-mail: soporte.hsm@honeywell.com

#### Europe, Middle East, and Africa

Telephone: +31 (0) 40 7999 393 Fax: +31 (0) 40 2425 672 E-mail: hsmeurosupport@honeywell.com

#### Hong Kong

Telephone: +852-29536436 Fax: +852-2511-3557 E-mail: aptechsupport@honeywell.com

#### Singapore

Telephone: +65-6842-7155 Fax: +65-6842-7166 E-mail: aptechsupport@honeywell.com

#### China

Telephone: +86 800 828 2803 Fax: +86-512-6762-2560 E-mail: aptechsupport@honeywell.com

#### Japan

Telephone: +81-3-6730-7344 Fax: +81-3-6730-7222 E-mail: aptechsupport@honeywell.com

#### **Online Technical Assistance**

You can also access technical assistance online at www.honeywellaidc.com.

## **Limited Warranty**

Honeywell International Inc. ("HII") warrants its products and optional accessories to be free from defects in materials and workmanship and to conform to HII's published specifications applicable to the products purchased at the time of shipment. This warranty does not cover any HII product which is (i) improperly installed or used; (ii) damaged by accident or negligence, including failure to follow the proper maintenance, service, and cleaning schedule; or (iii) damaged as a result of (A) modification or alteration by the purchaser or other party, (B) excessive voltage or current supplied to or drawn from the interface connections, (C) static electricity or electro-static discharge, (D) operation under conditions beyond the specified operating parameters, or (E) repair or service of the product by anyone other than HII or its authorized representatives.

This warranty shall extend from the time of shipment for the duration published by HII for the product at the time of purchase ("Warranty Period"). Any defective product must be returned (at purchaser's expense) during the Warranty Period to HII factory or authorized service center for inspection. No product will be accepted by HII without a Return Materials Authorization, which may be obtained by contacting HII. In the event that the product is returned to HII or its authorized service center within the Warranty Period and HII determines to its satisfaction that the product is defective due to defects in materials or workmanship, HII, at its sole option, will either repair or replace the product without charge, except for return shipping to HII.

EXCEPT AS MAY BE OTHERWISE PROVIDED BY APPLICABLE LAW, THE FOREGOING WARRANTY IS IN LIEU OF ALL OTHER COVENANTS OR WARRANTIES, EITHER EXPRESSED OR IMPLIED, ORAL OR WRITTEN, INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR NON-INFRINGEMENT.

HII'S RESPONSIBILITY AND PURCHASER'S EXCLUSIVE REMEDY UNDER THIS WARRANTY IS LIMITED TO THE REPAIR OR REPLACEMENT OF THE DEFECTIVE PRODUCT WITH NEW OR REFURBISHED PARTS. IN NO EVENT SHALL HII BE LIABLE FOR INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, AND, IN NO EVENT, SHALL ANY LIABILITY OF HII ARISING IN CONNECTION WITH ANY PRODUCT SOLD HEREUNDER (WHETHER SUCH LIABILITY ARISES FROM A CLAIM BASED ON CONTRACT, WARRANTY, TORT, OR OTHERWISE) EXCEED THE ACTUAL AMOUNT PAID TO HII FOR THE PRODUCT. THESE LIMITATIONS ON LIABILITY SHALL REMAIN IN FULL FORCE AND EFFECT EVEN WHEN HII MAY HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH INJURIES, LOSSES, OR DAMAGES. SOME STATES, PROVINCES, OR COUNTRIES DO NOT ALLOW THE EXCLUSION OR LIMITATIONS OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

All provisions of this Limited Warranty are separate and severable, which means that if any provision is held invalid and unenforceable, such determination shall not affect the validity of enforceability of the other provisions hereof. Use of any peripherals not provided by the manufacturer may result in damage not covered by this warranty. This includes but is not limited to: cables, power supplies, cradles, and docking stations. HII extends these warranties only to the first end-users of the products. These warranties are non-transferable.

The limited duration of the warranty for the Dolphin 7800 is as follows:

- The duration of the limited warranty for terminals with an integrated imager is one year.
- · The duration of the limited warranty for touch screens is one year.
- The duration of the limited warranty for the Dolphin 7800 HomeBase device, Dolphin 7800 eBase device, Dolphin 7800 Net Base device, Dolphin 7800 QuadCharger device, Dolphin 7800 Mobile Base, and Dolphin 7800 ChargeBase device, is one year.
- The duration of the limited warranty for batteries is one year. Use of any battery from a source other than Honeywell may result in damage not covered by the warranty. Batteries returned to Honeywell International Inc. in a reduced state may or not be replaced under this warranty. Battery life will be greatly increased when following the battery instructions in this user's guide.

### How to Extend Your Warranty

Honeywell International Inc. offers a variety of service plans on our hardware products. These agreements offer continued coverage for your equipment after the initial warranty expires. For more information, contact your Sales Representative, Customer Account Representative, or Product Service Marketing Manager from Honeywell International Inc., or your Authorized Reseller.

## Honeywell Scanning & Mobility

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